# NEW CASTLE COUNTY

# ROAD SYSTEM

# EXPRESSWAYS

#### **GUARDRAIL IMPROVEMENTS**

**PROJECT SCOPE/DESCRIPTION:** This project is for median safety improvements on I-495 and SR 1, where double-faced guardrail will be placed in the medians of limited-access, high-speed roads that are less than 40' wide. Operating funds will be utilized as the match for federal funding.

**PROJECT JUSTIFICATION:** There has been an elevated number of median crossover accidents in areas that are less than 40' wide on the Delaware Expressways. The guardrail is being installed in hopes of reducing the severity of crossover accidents.

**County:** New Castle

**Municipality:** 

**Funding Program:** Road System – Expressways

**Functional Category:** Preservation

Representative District: Senatorial District:





# GUARDRAIL IMPROVEMENTS (CONTINUED)

Project	Funding Type	Original Estimate	Current Estimate	Authorization	Committed as of 06/30/03	Expended as of 06/30/03	Committed Unexpended as of 06/30/03	Authorization Available
Guardrail Improvements		\$ 500.0						
Prior Years	State			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Federal			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2003	State		\$ 500.0	\$ 50.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 50.0
11200	Federal		ψ 20010	\$ 450.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 450.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2004 Authorized	State			\$ 0.0				\$ 50.0
	Federal Other			\$ 0.0 \$ 0.0				\$ 450.0 \$ 0.0
	Other			<b>3 0.0</b>				ş 0.0
FY 2005 Projected	State			\$ 0.0				\$ 50.0
	Federal			\$ 0.0				\$ 450.0
	Other			\$ 0.0				\$ 0.0
FY 2006 Projected	State			\$ 0.0				\$ 50.0
•	Federal			\$ 0.0				\$ 450.0
	Other			\$ 0.0				\$ 0.0
TV 2007 2000 D : 4 1	Gr. 4			Φ. 0.0				<b>4.50.0</b>
FY 2007-2009 Projected	State Federal			\$ 0.0 \$ 0.0				\$ 50.0 \$ 450.0
	Other			\$ 0.0				\$ 0.0
Total Projected	State			\$ 50.0	\$ 0.0			\$ 50.0
	Federal			\$ 450.0	\$ 0.0			\$ 450.0
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 500.0	\$ 500.0	\$ 500.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 500.0

# GUARDRAIL IMPROVEMENTS (CONTINUED)

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007 -2009
	Guardrail Improvements	С	90% FHWA	\$ 500.0	\$ 0.0	\$ 500.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Total All Funds			\$ 500.0	\$ 0.0	\$ 500.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0

#### I-95, MARYLAND STATE LINE TO SR141

**PROJECT SCOPE/DESCRIPTION:** This project will consist of major improvements throughout the area to help alleviate traffic congestion. These improvements include:

**Churchman's Road Bridge over I-95** – Construction of a new two-lane bridge on Churchman's Road over I-95 that will provide shoulders and sidewalks.

I-95, 5<sup>th</sup> Lane Expansion on I-95 Churchman's Bridge to SR141 – Construction will include a new 5<sup>th</sup> travel lane from the new bridge to SR141 through Churchman's Marsh.

**Planning and Formal Environmental Documentation** – In FY 2004, the department's efforts will focus on the preparation of the formal and environmental documentation, that is a federal requirement for funding.

SR 1 / I-95 Interchange – Construction of a new multiple-lane interchange that will eliminate the traffic weaving around the Christiana Mall, SR 1, and I-95 areas.



**Toll Plaza Rehabilitation and Highway Speed** *E-ZPass* **Improvements** – This project will enhance that current computer technology utilized on I-95 to process electronic toll collection by installing safe highway speed lanes.

**PROJECT JUSTIFICATION:** The Department will invest over \$185 million to reduce traffic congestion in the busy I-95 northeast corridor.

**County:** New Castle

**Municipality:** 

**Funding Program:** Road System – Expressways

**Functional Category:** Development **Representative District:** 18, 24, 25, 26, **Senatorial District:** 9, 10, 11











# *I-95, MARYLAND STATE LINE TO SR141 (CONTINUED)*

Project	Funding Type	Original Estimate	Current Estimate	Authorization	Committed as of 06/30/03	Expended as of 06/30/03	Committed Unexpended as of 06/30/03	Authorization Available
							us 01 00/30/03	
I-95, Maryland State Line to SR141		\$ 61,000.0						
Prior Years	State			\$ 1,000.0	\$ 690.0	\$ 279.9	\$ 410.1	\$ 310.0
	Federal			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2003	State		\$ 187,281.0	\$ 1,177.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 1,487.0
2	Federal		+,	\$ 2,104.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 2,104.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2004 Authorized	State			\$ 2,800.0				\$ 4,287.0
1 1 2004 Authorized	Federal			\$ 3,200.0				\$ 5,304.0
	Other			\$ 0.0				\$ 0.0
FY 2005 Projected	State			\$ 4,800.0				\$ 9,087.0
F1 2003 110 jected	Federal			\$ 19,200.0				\$ 24,504.0
	Other			\$ 19,200.0				\$ 24,304.0
FY 2006 Projected	State			\$ 7,600.0				\$ 16,687.0
	Federal Other			\$ 30,400.0 \$ 0.0				\$ 54,904.0 \$ 0.0
FY 2007-2009 Projected	State			\$ 23,000.0				\$ 39,687.0
•	Federal			\$ 92,000.0				\$ 146,904.0
	Other			\$ 0.0				\$ 0.0
Total Projected	State			\$ 40,377.0	\$ 690.0			\$ 39,687.0
-	Federal			\$ 146,904.0	\$ 0.0			\$ 146,904.0
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 61,000.0	\$ 187,281.0	\$ 187,281.0	\$ 690.0	\$ 279.9	\$ 410.2	\$ 186,591.0

# *I-95, MARYLAND STATE LINE TO SR141 (CONTINUED)*

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007 -2009
	I-95, Maryland State Line to SR141									
91-071-05	Churchman's Road Bridge	PE	100% ST	\$ 451.0	\$ 451.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
		RW	100% ST	200.0	200.0	0.0	0.0	0.0	0.0	0.0
		С	80% FHWA	16,000.0	0.0	0.0	0.0	16,000.0	0.0	0.0
	I-95, 5th Lane Expansion from Churchman's Bridge to SR141	PE	80% FHWA	5,000.0	0.0	0.0	3,000.0	2,000.0	0.0	0.0
	10 0 0 1 1 1	C	80% FHWA	55,000.0	0.0	0.0	0.0	0.0	0.0	55,000.0
	Planning and Formal Environmental Documentation	ENV	100% ST	2,000.0	0.0	0.0	2,000.0	0.0	0.0	0.0
23-690-03	SR 1/I-95 Interchange	PE	80% FHWA	5,000.0	0.0	0.0	0.0	2,000.0	3,000.0	0.0
		С	80% FHWA	62,630.0	0.0	2,630.0	0.0	0.0	0.0	60,000.0
21-047-02	Toll Plaza Rehabilitation and Highway Speed E-ZPass Improvements	PLAN	100% ST	1,000.0	0.0	1,000.0	0.0	0.0	0.0	0.0
	ingilitary opera 2 22 and improvements	PE	80% FHWA	5,000.0		0.0	1,000.0	4,000.0	0.0	0.0
		С	80% FHWA	35,000.0	0.0	0.0	0.0	0.0	35,000.0	0.0
	Total All Funds			\$ 187,281.0	\$ 651.0	\$ 3,630.0	\$ 6,000.0	\$ 24,000.0	\$ 38,000.0	\$ 115,000.0

#### *I-95, NORTHBOUND RAMP TO US202*

**PROJECT SCOPE/DESCRIPTION:** This project will widen the existing ramp from northbound I-95 to northbound US202 in the I-95/US202 interchange from one to two lanes.

**PROJECT JUSTIFICATION:** The current demand for use of this ramp backs traffic, at various times during the day, onto I-95 as far south as the City of Wilmington. In so doing, it effectively restricts the capacity of two lanes on I-95, where only three exist, and creates a safety problem. With the improvements to US202 as part of the Blue Ball Properties project, and the widening of this ramp, the capacity and safety issues on I-95 will be eliminated.

County: New Castle Municipality: Wilmington

Funding Program: Road System – Expressways

**Functional Category:** Expansion

**Representative District:** 4, 6 **Senatorial District:** 1, 4







# *I-95, NORTHBOUND RAMP TO US202 (CONTINUED)*

Project	Funding Type	Original Estimate	Current Estimate	Authorization	Committed as of 06/30/03	Expended as of 06/30/03	Committed Unexpended as of 06/30/03	Authorization Available
I-95 Northbound Ramp to US202		\$ 21,136.7						
Prior Years	State			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
Thor rears	Federal			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
				·		·	·	·
FY 2003	State		\$ 22,900.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Federal			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2004 Authorized	State			\$ 0.0				\$ 0.0
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2005 Projected	State			\$ 2,000.0				\$ 2,000.0
112000110Jeeccu	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
	0.000			7 313				7 70
FY 2006 Projected	State			\$ 2,090.0				\$ 4,090.0
	Federal			\$ 18,810.0				\$ 18,810.0
	Other			\$ 0.0				\$ 0.0
FY 2007-2009 Projected	State			\$ 0.0				\$ 4,090.0
	Federal			\$ 0.0				\$ 18,810.0
	Other			\$ 0.0				\$ 0.0
Total Products	State			\$ 4,090.0	\$ 0.0			\$ 4,090.0
Total Projected	State Federal				\$ 0.0 \$ 0.0			
				\$ 18,810.0	·			\$ 18,810.0
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 21,136.7	\$ 22,900.0	\$ 22,900.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 22,900.0

# *I-95, NORTHBOUND RAMP TO US202 (CONTINUED)*

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007 -2009
	I-95, Northbound Ramp to US202									
23-106-07	I-95, Northbound Ramp to US202	PE	100% ST	\$ 2,000.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 2,000.0	\$ 0.0	\$ 0.0
		C	90% FHWA	20,900.0	0.0	0.0	0.0	0.0	20,900.0	0.0
	Total All Funds			\$ 22,900.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 2,000.0	\$ 20,900.0	\$ 0.0

#### I-95, WILMINGTON VIADUCT TO US202

PROJECT SCOPE/DESCRIPTION: This project includes the rehabilitation of existing bridges along I-95 from US202 to the Wilmington Viaduct including bridges along and over I-95.

This work includes bearing replacements, concrete repairs, painting, etc. Also included are approach slab replacements on the Wilmington viaduct; a short-term mill and overlay for the pavement section through Wilmington; and major rehabilitation on the superstructure of the Brandywine bridge including parapit walls, approach slab and the center joint.

PROJECT JUSTIFICATION: Due to bridge ratings, deterioration, vertical clearances, etc., these bridges require repair work to be completed.

New Castle **County: Municipality:** Wilmington

Road System – Expressways **Funding Program:** 

**Functional Category:** Preservation

**Representative District:** 2, 3, 4 **Senatorial District:** 1, 2, 3









# *I-95, WILMINGTON VIADUCT TO US202 (CONTINUED)*

Project	Funding Type	Original Estimate	Current Estimate	Authorization	Committed as of 06/30/03	Expended as of 06/30/03	Committed Unexpended as of 06/30/03	Authorization Available
I-95, Wilmington Viaduct to US202		\$ 20,569.7						
Prior Years	State			\$ 9,354.0	\$ 3,909.6	\$ 163.7	\$ 3,745.9	\$ 5,444.4
	Federal			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2003	State		\$ 23,850.0	\$ 2,899.2	\$ 0.0	\$ 0.0	\$ 0.0	\$ 8,343.6
	Federal		, ,,,,,,,,	\$ 11,596.8	\$ 0.0	\$ 0.0	\$ 0.0	\$ 11,596.8
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2004 Authorized	State			\$ 0.0				\$ 8,343.6
1 1 2004 Muthorized	Federal			\$ 0.0				\$ 11,596.8
	Other			\$ 0.0				\$ 0.0
FY 2005 Projected	State			\$ 0.0				\$ 8,343.6
11 2000 11 0 jected	Federal			\$ 0.0				\$ 11,596.8
	Other			\$ 0.0				\$ 0.0
FY 2006 Projected	State			\$ 0.0				\$ 8,343.6
<b>,</b>	Federal			\$ 0.0				\$ 11,596.8
	Other			\$ 0.0				\$ 0.0
FY 2007-2009 Projected	State			\$ 0.0				\$ 8,343.6
1120072005 110Jected	Federal			\$ 0.0				\$ 11,596.8
	Other			\$ 0.0				\$ 0.0
Total Projected	State			\$ 12,253.2	\$ 3,909.6			\$ 8,343.6
	Federal			\$ 11,596.8	\$ 0.0			\$ 11,596.8
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 20,569.7	\$ 23,850.0	\$ 23,850.0	\$ 3,909.7	\$ 163.8	\$ 3,745.9	\$ 19,940.3

# *I-95, WILMINGTON VIADUCT TO US202 (CONTINUED)*

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007 -2009
	I-95, Wilmington Viaduct to US202	PE	100% ST	\$ 9,354.0		· ·	\$ 0.0	\$ 0.0	· ·	·
		С	80% FHWA	11,215.7	0.0	11,215.7	0.0	0.0	0.0	0.0
23-074-03	I-95, Wilmington Bridges	PE	80% FHWA	496.0	0.0	496.0	0.0	0.0	0.0	0.0
		С	80% FHWA	2,784.3	0.0	2,784.3	0.0	0.0	0.0	0.0
	Total All Funds			\$ 23,850.0	\$ 9,354.0	\$ 14,496.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0

#### *I-295 IMPROVEMENTS*

**PROJECT SCOPE/DESCRIPTION:** In FY 2000, the Delaware River and Bay Authority (DRBA) began a five to six-year rehabilitation project on all the approaches and ramps on the west side of the Delaware Memorial Bridge. The work involves the rehabilitation of the existing pavement, replacement or rehabilitation of bridges, the erection of new high mast light standards, surveillance cameras, electronic signage, and the installation of *E-ZPass* readers at the toll plaza. The ultimate objectives are to eliminate dangerous weaving traffic patterns and to provide a new road surface for the entire network. Construction on the eastbound lanes closest to the bridge was completed in FY 2000, and the work closest to the bridge on the westbound lanes is currently under construction.

DelDOT currently maintains I-295 west of Bridges 1-008E and 1-008W. DRBA is responsible for the remaining portion on I-295 to and including the Delaware Memorial Bridge. New planned improvements will be a joint effort by DelDOT and DRBA. DRBA will design and manage the improvements with oversight from DelDOT.



#### Improvements will include:

- Installation of ten new light standards at \$100,000 each This cost covers procurement, installation, maintenance, and 30 years worth of electricity, with rate increases paid by DRBA. The light standards will be within the limits of DelDOT maintenance responsibilities for I-295 and US 13. The length of the project is from 1,500' west of the Interstate Connection of northbound I-95/I-295 to 2,400' west of US 13.
- A collector and distributor slip ramp with mill and overlay on I-295 DRBA has developed a concept that will solve the existing weave problem from southbound I-95 to eastbound I-295 to southbound US 13. This solution incorporates a collector/distributor (C/D) ramp and barrier to preclude the weave and offers optional routes to replace the moves eliminated by the barrier. DRBA will remove the current ramps from southbound US 13 to the eastbound bridge and construct a new access which will require motorists to travel further south on US 13, and then make a cross traffic turn to get onto the Delaware Memorial Bridge. DRBA, DelDOT, and Federal Highway Administration (FHWA) engineers have analyzed this traffic volume and believe it is light enough to warrant the new pattern. An overlay and pavement rehabilitation to I-295 will also be done. The length of the project is from the interstate connection of northbound I-95/I-295 to 2,400' west of US 13.
- Third lane expansion DRBA and DelDOT will continue to work together on the I-95/I-295 interchange issues to study lane flexibility and reach a decision that is best for all, at the most effective cost. During peak periods, the current two-lane configuration is not adequate. Air quality issues will need to be addressed. The length of the project is from I-95/I-141 interchange to 2,400' west of US 13.

#### *I-295 IMPROVEMENTS (CONTINUED)*

**PROJECT JUSTIFICATION:** This project will address the difficult traffic weave patterns between I-295 from the Delaware Memorial Bridge to US 13, and I-95 northbound and southbound by eliminating the safety problems in the area.

County: New Castle

**Municipality:** 

Funding Program: Road System – Expressways

Functional Category:PreservationRepresentative District:16, 17Senatorial District:2, 13







# *I-295 IMPROVEMENTS (CONTINUED)*

Project	Funding	Original	Current	Authorization	Committed	Expended	Committed	Authorization
	Туре	Estimate	Estimate		as of 06/30/03	as of 06/30/03	Unexpended	Available
							as of 06/30/03	
I-295 Improvements		\$ 10,800.0						
Prior Years	State			\$ 400.0	\$ 400.0	\$ 0.0	\$ 400.0	\$ 0.0
	Federal			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
						\$ 0.0		
FY 2003	State		\$ 10,800.0	\$ 1,000.0	\$ 1,000.0	\$ 0.0	\$ 1,000.0	\$ 0.0
	Federal			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2004 Authorized	State			\$ 2,300.0				\$ 2,300.0
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2005 Projected	State			\$ 500.0				\$ 2,800.0
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
				·				·
FY 2006 Projected	State			\$ 0.0				\$ 2,800.0
-	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2007-2009 Projected	State			\$ 6,600.0				\$ 9,400.0
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
Total Projected	State			\$ 10,800.0	\$ 1,400.0			\$ 9,400.0
Total I Tojecteu	Federal			\$ 10,800.0	\$ 0.0			\$ 0.0
	Other			\$ 0.0	\$ 0.0			\$ 0.0
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 10,800.0	\$ 10,800.0	\$ 10,800.0	\$ 1,400.0	\$ 0.0	\$ 1,400.0	\$ 9,400.0

# *I-295 IMPROVEMENTS (CONTINUED)*

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007 -2009
	I-295 Improvements									
	Lighting	С	100% ST	\$ 1,000.0	\$ 0.0	\$ 1,000.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Weave Elimination From I-95 to US 13	C	100% ST	2,300.0	0.0	0.0	2,300.0	0.0	0.0	0.0
	3rd Lane from SR141 to SR 9	PLAN C	100% ST 100% ST	900.0	400.0	0.0	0.0	500.0		0.0 6,600.0
	Total All Funds			\$ 10,800.0	\$ 400.0	\$ 1,000.0	\$ 2,300.0	\$ 500.0	\$ 0.0	